3°) $\forall n \in \mathbb{N}$; $V_n = V_0 + n.r$

ou $r = 1$ et $V_0 = \frac{1}{3}$

Donc $\boxed{V_n = \frac{1}{3} + n \quad \forall n \in \mathbb{N}}$

) On a $\forall n \in \mathbb{N}$; $V_n = \frac{1}{1+U_n}$

$\Rightarrow 1 + U_n = \frac{1}{V_n}$

$\Rightarrow U_n = \frac{1}{V_n} - 1$

$\Rightarrow U_n = \frac{1 - V_n}{V_n}$

$\Rightarrow U_n = \frac{1 - \frac{1}{3} - n}{\frac{1}{3} + n}$

$\Rightarrow \boxed{U_n = \frac{2 - 3n}{1 + 3n} \quad \forall n \in \mathbb{N}}$